Complete Summary

GUIDELINE TITLE

Energy intake in pre-dialysis patients.

BIBLIOGRAPHIC SOURCE(S)

Voss D. Energy intake in pre-dialysis patients. Nephrology 2005 Dec;10(S5):S177-9.

Voss D. Energy intake in predialysis patients. Westmead NSW (Australia): CARI - Caring for Australasians with Renal Impairment; 2005 Aug. 7 p. [14 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY
DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

Chronic kidney disease

GUIDELINE CATEGORY

Management Treatment

CLINICAL SPECIALTY

Family Practice Internal Medicine Nephrology Nutrition Pediatrics

INTENDED USERS

Dietitians Physicians

GUIDELINE OBJECTIVE(S)

To assess whether different calorie intake based on body weight is associated with mortality and morbidity

TARGET POPULATION

Adults and children with chronic kidney disease

INTERVENTIONS AND PRACTICES CONSIDERED

Determination of ideal calorie energy intake, referral to a dietician skilled in renal care, and diet modification (to achieve a nutritionally balance diet) were considered but not recommended.

MAJOR OUTCOMES CONSIDERED

- Caloric energy intake
- Body mass index
- Protein malnutrition
- Morbidity
- Mortality

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Databases searched: MeSH terms and text words for kidney disease were combined with MeSH terms and text words for energy intake then combined with the Cochrane highly sensitive search strategy for randomized controlled trials and search filters for identifying prognosis and aetiology studies. The search was carried out in Medline (1996 – November Week 2 2003). The Cochrane Renal Group Trials Register was also searched for trials not indexed in Medline.

Date of searches: 27 November 2003.

NUMBER OF SOURCE DOCUMENTS

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Level I: Evidence obtained from a systematic review of all relevant randomized controlled trials (RCTs)

Level II: Evidence obtained from at least one properly designed RCT

Level III: Evidence obtained from well-designed pseudo-randomized controlled trials (alternate allocation or some other method); comparative studies with concurrent controls and allocation not randomized, cohort studies, case-control studies, interrupted time series with a control group; comparative studies with historical control, two or more single arm studies, interrupted time series without a parallel control group

Level IV: Evidence obtained from case series, either post-test or pretest/post-test

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

<u>Recommendations of Others</u>. Recommendations regarding nutrition and growth in kidney disease from the following groups were discussed: Kidney Disease Outcomes Quality Initiative, British Renal Association, and European Dialysis & Transplant Nurses Association/European Renal Care Association.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Definitions for the levels of evidence (I–IV) can be found at the end of the "Major Recommendations" field.

Guidelines

No recommendations possible based on Level I or II evidence

Suggestions for Clinical Care

(Suggestions are based on Level III and IV evidence)

- Pre-dialysis chronic kidney disease (CKD) patients should have an ideal calorie energy intake determined for their age, gender, body mass index (BMI) and level of physical activity. A nutritionally balanced diet with adequate energy intake to maintain a healthy weight should then be prescribed. To avoid protein malnutrition or undesired weight loss, the recommended energy intake is 35 kCal/kg ideal body weight (IBW)/day. In patients who maintain a sedentary lifestyle or a low level of activity or who are elderly, 30–35 kCal/kg IBW/day is recommended. (Level IV evidence)
- Early referral to a dietician skilled in renal care is recommended. The renal dietician should address issues of energy balance along with protein intake. Attainment of an IBW (as assessed by BMI) may need addressing concurrently.

Definitions:

Levels of Evidence

Level I: Evidence obtained from a systematic review of all relevant randomized controlled trials (RCTs)

Level II: Evidence obtained from at least one properly designed RCT

Level III: Evidence obtained from well-designed pseudo-randomized controlled trials (alternate allocation or some other method); comparative studies with concurrent controls and allocation not randomized, cohort studies, case-control studies, interrupted time series with a control group; comparative studies with historical control, two or more single arm studies, interrupted time series without a parallel control group

Level IV: Evidence obtained from case series, either post-test or pretest/post-test

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Prescription of a nutritionally balanced diet with adequate energy intake to maintain a healthy weight

POTENTIAL HARMS

- Protein malnutrition
- Undesired weight loss

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2005 Dec

GUIDELINE DEVELOPER(S)

Caring for Australasians with Renal Impairment - Disease Specific Society

SOURCE(S) OF FUNDING

Industry-sponsored funding administered through Kidney Health Australia

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Author: David Voss

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

All guideline writers are required to fill out a declaration of conflict of interest.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the <u>Caring</u> for Australasians with Renal Impairment Web site.

Print copies: Available from Caring for Australasians with Renal Impairment, Locked Bag 4001, Centre for Kidney Research, Westmead NSW, Australia 2145

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

• The CARI guidelines. A guide for writers. Caring for Australasians with Renal Impairment. 2006 May. 6 p.

Electronic copies: Available from the <u>Caring for Australasians with Renal Impairment (CARI) Web site</u>.

PATIENT RESOURCES

None available

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